



SPH10H

Bluetooth® Stereo Headset and Intercom
for Half Helmets



SENA

www.senablueetooth.com

User's Guide

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1. INTRODUCTION

Thank you for choosing the Sena SPH10H, Bluetooth Stereo Headset and Intercom for Half Helmets. With the SPH10H, you can call handsfree on your Bluetooth mobile phone, listen to stereo music or voice instructions of GPS navigations by Bluetooth wirelessly, and have intercom conversations in full duplex with a passenger or other motorcycle riders.

The SPH10H is compliant with the Bluetooth 3.0 supporting the following profiles: Headset Profile, Hands-Free Profile (HFP), Advanced Audio Distribution Profile (A2DP), and Audio Video Remote Control Profile (AVRCP). Please check with the manufacturers of other devices to determine their compatibility with this headset.

Please read this user's guide carefully before using the headset. Also check [**www.senablueetooth.com/support**](http://www.senablueetooth.com/support) for the latest version of the user's guide and additional information related to Sena Bluetooth products.

The SPH10H features:

- Bluetooth handsfree for Bluetooth mobile phones
- Bluetooth stereo headset for Bluetooth audio devices such as MP3 players
- Bluetooth stereo headset for Bluetooth GPS navigations
- Bluetooth intercom up to 500 meters (540 yards)*
- Four-way conference intercom
- Three-way conference phone call with intercom participant
- Multipoint Bluetooth pairing with GPS navigation or Sena SR10 Two-way Radio Adapter
- Multipoint Bluetooth pairing for 2 mobile phones
- Simple ear pad design for quick installation to half helmets
- Compatible with shorty helmets in the market
- Stereo music by 3.5mm audio cable
- Firmware upgradeable

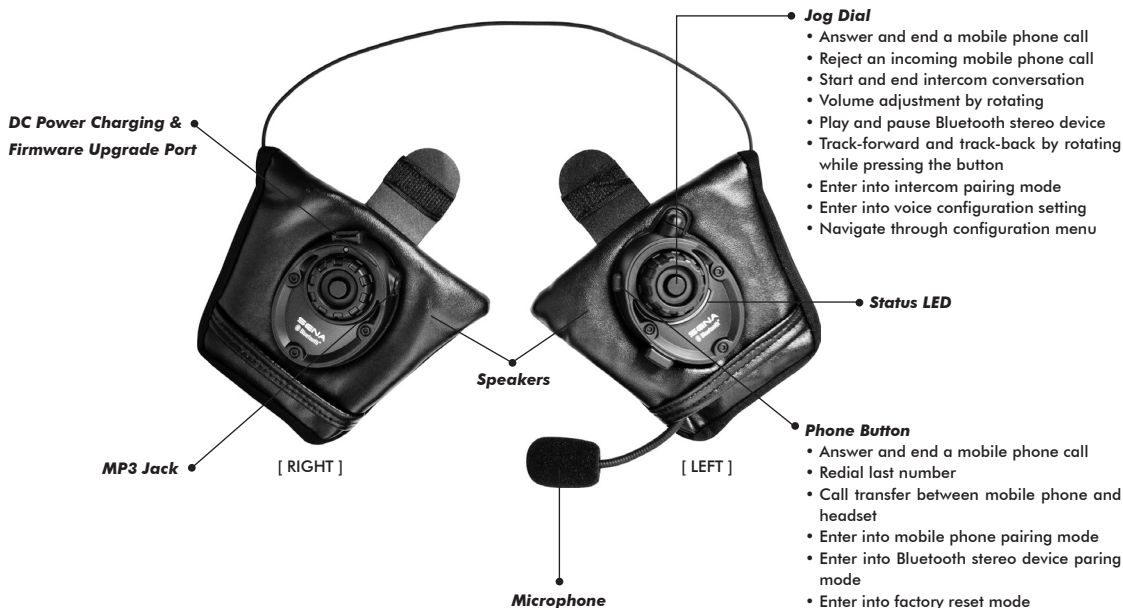
Key Specifications:

- Bluetooth 3.0
- Supporting profiles: Headset Profile, Hands-Free Profile (HFP), Advanced Audio Distribution Profile (A2DP), Audio Video Remote Control Profile (AVRCP)

*in open terrain

2. PACKAGE CONTENTS

• SPH10H Headset



- **USB Power and Data Cable**



- **Cigarette Charger**



- **Stereo Audio Cable**



- **Tab Insertion Tool**



3. INSTALLING THE SPH10H ON YOUR HELMET

1. Insert the two plastic tabs of the SPH10H on the headset ear pads into the left and right side of your helmet. You may use the Tab Insertion Tool located in the package to help insert the plastic tabs into your helmet. Place the Tab Insertion Tool against the tab side with velcro. Insert the tab and insertion tool at the same time into the helmet. When the tab is in the proper position, slide the Tab Insertion Tool out. The velcro will now hold the tab securely in place.



2. Please make sure that one of the headset ear pads with the microphone is located on the left side of your helmet.



3. Tuck in the cable that connects left and right ear pads, between the helmet shell and protective padding or inside the helmet.



4. POWERING ON/OFF AND CHARGING

To power on and off the headset, you don't need to press and hold any button for several seconds. Just short press the Jog Dial and the Phone Button simultaneously, and you will get quick on-and-off convenience.

4.1 Powering On

Press the Jog Dial and the Phone Button at the same time for about 1 second to power on. The blue LED turns on and you will hear ascending beeps.

4.2 Powering Off

Just short press the Jog Dial and the Phone Button simultaneously, you don't need to press and hold for a few seconds. The red LED turns on for a while until it turns off completely and you will hear descending beeps.

4.3 Charging

The LED turns on red while charging, and turns to blue when the headset is fully charged. It takes about 2.5 hours to be completely charged.

4.4 Low Battery Warning

When the battery is low, the blinking blue LED in stand-by mode turns to red and you will hear mid-tone triple beeps and a voice prompt saying “**Low Battery**”.

4.5 Checking the Battery Level

You can check the battery level in two different ways when the headset is powering on.

4.5.1 LED Indicator

When the headset is powering on, the red LED flashes rapidly indicating the battery level.

4 flashes = High, 70~100%

3 flashes = Medium, 30~70%

2 flashes = Low, 0~30%

4.5.2 Voice Prompt Indicator

When you power on the headset, keep pressing the Jog Dial and Phone Button simultaneously for about 3 seconds until you hear high tone triple beeps. Then you will hear voice prompt indicating the battery level. However, if you release the buttons as soon as the headset turns on, you will not hear the voice prompt of battery level indication.

5. VOLUME ADJUSTMENT

You can easily adjust the volume by rotating the Jog Dial. You will hear a beep when the volume reaches maximum or minimum level. The volume is set and maintained independently at different levels for each audio source even when you turn off and on the headset. For example, once you set the volume for mobile phone handsfree, it will not change even if you adjust the volume when you hear Bluetooth MP3 music. So you can always maintain the preferred optimum volume level for each audio source.

6. PAIRING THE SPH10H WITH BLUETOOTH DEVICES

Before using the SPH10H Bluetooth headset with any of Bluetooth devices for the first time, you need to do the pairing operation. It can be paired with Bluetooth mobile phones, Bluetooth stereo devices such as MP3, or motorcycle specific Bluetooth GPS, and with other Sena Bluetooth headsets. This pairing operation is only required once for each Bluetooth device. The headset will remain paired with the devices and automatically connects to the paired devices again when they are within range. You will hear a high tone single beep and a voice prompt when the headset connects to the paired device automatically: **“Phone connected”** to a mobile phone, **“Media connected”** to a Bluetooth stereo device.

6.1 Mobile Phone Pairing

1. Turn on the headset and press the Phone Button for 5 seconds until the LED flashes red and blue alternately and you hear multiple beeps. You will hear a voice prompt saying **“Phone pairing”**.

2. Search for Bluetooth devices on your mobile phone. Select the Sena SPH10H in the list of the devices detected on the mobile phone.
3. Enter 0000 for the PIN. Some mobile phone may not ask for the PIN.
4. The mobile phone confirms that pairing has completed and the SPH10H is ready to use. You will hear a voice prompt from the SPH10H saying **“Your headset is paired”**.
5. If the pairing process is not completed within three minutes, the SPH10H will return to stand-by mode.

6.2 Bluetooth Stereo Device Pairing

1. If the Bluetooth stereo device is integrated with the mobile phone such as smartphones, you don't need to pair the SPH10H with it separately. When the SPH10H is paired with the mobile phone, it is also paired as a stereo music device.
2. If you have a stand alone Bluetooth stereo device, follow the pairing procedure separately. The procedure is the same as the procedure in “6.1 Mobile Phone Pairing”.

Note:

- 1. If Bluetooth connection between the headset and a mobile phone is disconnected, tap the Phone Button to recover the Bluetooth connection immediately.*
- 2. If Bluetooth connection between the headset and a media player is disconnected, press the Jog Dial for 1 second to recover the Bluetooth connection and play.*

6.3 Bluetooth GPS Navigation Pairing

You can listen to voice instruction from Bluetooth GPS navigation. Some GPS systems use mobile phone profile (HFP, Hands-Free Profile) and others use stereo music profile (A2DP, Advanced Audio Distribution Profile). Most motorcycle specific GPS systems use mobile phone profile for turn-by-turn voice instruction. You can simultaneously use a mobile phone and a GPS which uses mobile phone profile by one of the following procedures.

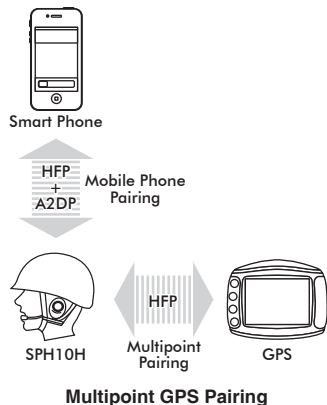
6.3.1 Multipoint GPS Pairing

If you use GPS only for turn-by-turn voice instructions, not for Bluetooth stereo music streaming, multipoint pairing is recommended for the GPS connection. Multipoint Bluetooth pairing allows the SPH10H to connect two HFP devices at the same time: mobile phone and GPS

navigation. Follow the steps below to pair the GPS using the multipoint pairing.

1. Turn on the headset and press the Jog Dial for 5 seconds until the red LED is rapidly flashing and you hear multiple beeps.
2. Within 2 seconds, tap the Phone Button again, then the LED turns to blue flashing and the beeps turn to high tone double beeps. You will hear a voice prompt saying **“Multipoint pairing”**.
3. Search for Bluetooth devices on the GPS navigation screen. Select the Sena SPH10H in the list of the devices detected on the GPS.
4. Enter 0000 for the PIN.
5. The GPS confirms that pairing has completed and the SPH10H is ready to use. You will hear a voice prompt from the SPH10H saying **“Your headset is paired”**.
6. If the pairing process is not completed within three minutes, the SPH10H will return to stand-by mode.

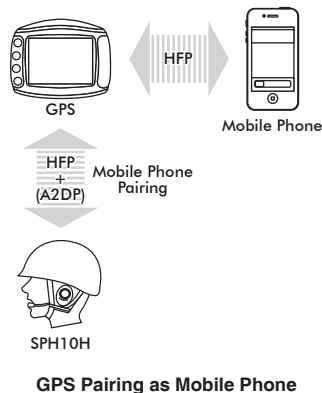
The pairing diagram for multipoint GPS pairing is shown in the figure below.



6.3.2 GPS Pairing as Mobile Phone

If GPS is not only used for turn-by-turn voice instructions but also is your preferred Bluetooth stereo music source, you can pair the GPS to the SPH10H by following the simple procedures in “6.1 Mobile Phone Pairing”. When you do this, the SPH10H thinks the GPS is a mobile phone so you can no longer pair your mobile phone to the SPH10H directly. However, since some GPS systems

support mobile phone bridging over Bluetooth, you can pair the mobile phone to the GPS to use your mobile phone. Please refer to the user's guide of your GPS for details.



Note:

You have to use a motorcycle specific GPS which transmits turn-by-turn voice instruction to the headset by Bluetooth. Most automotive GPS systems don't have this feature.

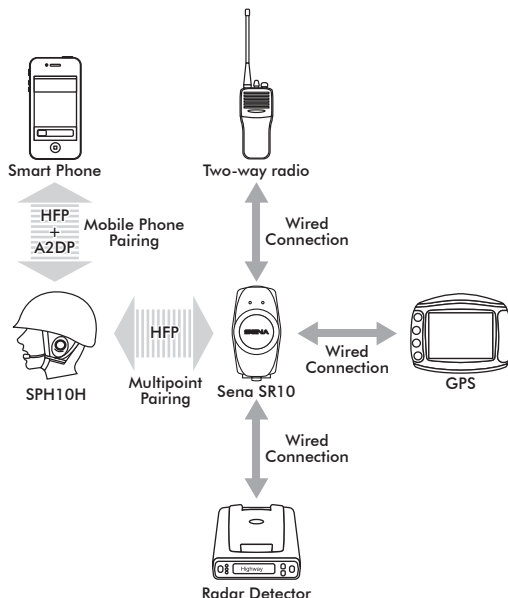
6.4 Pairing with the Sena SR10, Bluetooth Two-way Radio Adapter

The Sena SR10 is a Bluetooth two-way radio adapter for group communication, and uses HFP as do most motorcycle specific GPS navigation systems. If you pair the SPH10H with a SR10 by multipoint pairing, the SPH10H is able to have two HFP devices at the same time: mobile phone and Sena SR10.

1. Turn on the headset and press the Jog Dial for 5 seconds until the red LED is rapidly flashing and you hear multiple beeps.
2. Within 2 seconds, tap the Phone Button again, then the LED turns to blue flashing and the beeps turn to high tone double beeps. You will hear a voice prompt saying **“Multipoint pairing”**.
3. Turn on the SR10 and follow the SR10's “Bluetooth Headset Pairing” procedure to complete the process. Please refer to the SR10 user's guide for details.
4. When the pairing is completed, you will hear a voice prompt saying **“Your headset is paired”**.
5. If the pairing process is not completed within three minutes, the SPH10H will return to stand-by mode.

The incoming audio from the two-way radio via SR10 is heard in the background while having an intercom conversation or a mobile phone call. You can listen

to music, answer a mobile call, have an intercom conversation and use a two-way radio via SR10 for group communication as shown in the figure below. A GPS navigation or a radar detector which has headphone jack or audio line-out could be connected to the SR10 by wire. The GPS voice instruction or the radar detector alarm is also heard in the background via SR10 while having an intercom conversation or a phone call. Please refer to the SR10 user's guide for details.



Parallel Connection of SR10 and Mobile Phone by Bluetooth Multipoint Pairing

7. PAIRING WITH SELECTIVE PROFILE: A2DP STEREO OR HANDSFREE

If you have a MP3 stereo music phone such as a smartphone, sometimes you may need to selectively use the SPH10H for A2DP stereo music only or for mobile phone handsfree only. This instruction is for advanced users who want to pair the SPH10H to their smart phones only with one selective profile: A2DP stereo for music or HFP for phone call.

If you have previously paired a mobile phone to the SPH10H, you must clear the previous pairing list on both devices; the mobile phone and SPH10H. To clear the pairing list on SPH10H, please do a factory reset or follow the pairing list clearing procedure described in this manual. To clear the pairing list on the mobile phone, please refer to the mobile phone manual. For most smart phones, delete the Sena SPH10H from the list of Bluetooth devices in setting menu.

7.1 A2DP Stereo Music Only

1. Turn on the headset and press the Phone Button for 5 seconds until the LED flashes red and blue alternately and you hear multiple beeps.

2. Within 2 seconds, tap the Jog Dial again, then the LED turns to red flashing and the beeps turn to double mid-tone beeps. You will hear a voice prompt saying **“Media selective pairing”**.
3. Search for Bluetooth devices on your smartphone. Select the Sena SPH10H in the list of devices detected on your phone.
4. Enter 0000 for the PIN. Some smartphones may not ask for PIN.

7.2 HFP for Phone Call Only

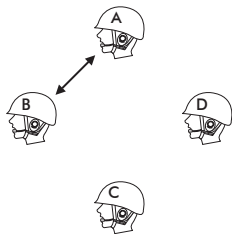
1. Turn on the headset and press the Phone Button for 5 seconds until the LED flashes red and blue alternately and you hear multiple beeps.
2. Within 2 seconds, tap the Phone Button again, then the LED turns to blue flashing and the beeps turn to multiple mid-tone beeps. You will hear a voice prompt saying **“Phone selective pairing”**.
3. Search for Bluetooth devices on your smartphone. Select the Sena SPH10H in the list of devices detected on your phone.
4. Enter 0000 for the PIN. Some smart phones may not ask for PIN.

8. INTERCOM PAIRING

8.1 Pairing with Other SPH10H Headsets for Intercom Conversation

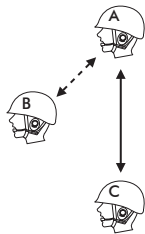
The SPH10H can be paired with up to three other headsets for Bluetooth intercom conversation.

1. Turn on the two SPH10H headsets (A and B) that you would like to pair with each other.
2. Press and hold the Jog Dial of the headset A and B for 5 seconds until red LEDs of the both units start to flash rapidly. You will hear a voice prompt saying **“Intercom pairing”**.
3. Simply tap the Jog Dial of any one of the two headsets A or B (It doesn't matter that you choose A or B.) and wait until the LEDs of both headsets turn to blue and intercom connection is automatically established. The two SPH10H headsets A and B are paired with each other for intercom conversation. If the pairing process is not completed within one minute, the SPH10H will return to stand-by mode.

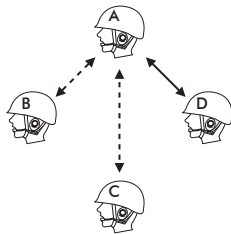


Pairing A & B

4. You can make other pairings between the headset A and C, and between the headset A and D by following the same procedure as above.



Pairing A & C



Pairing A & D

5. The intercom pairing queue is '**Last-Come, First-Served**'. If a headset has multiple paired headsets for intercom conversations, the last paired headset is set as **first intercom friend**. The previous intercom friend becomes **second intercom friend**, and **third intercom friend**.

Note:

*For example, after the pairing procedures listed above, headset D is the **first intercom friend** of headset A. Headset C is the **second intercom friend** of headset A, and headset B is the **third intercom friend** of headset A..*

8.2 Pairing with Other Sena Headset Models for Intercom Conversation

The SPH10H can be paired with all other Sena headset models such as the SMH10 and the SPH10 for intercom conversation. Please follow the same procedure as above to pair with these headset models.

Note:

The SMH5 cannot participate in three-way or four-way conference intercom with the SPH10H or the SPH10. The SMH5 has a limited capability of having two-way intercom with each other or with other Sena headsets such as the SPH10H and the SPH10.

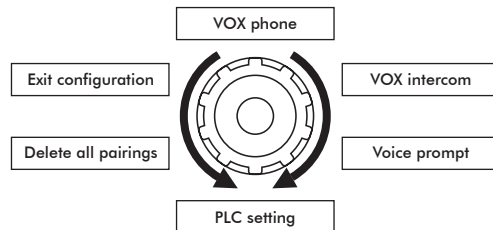
9. SPH10H CONFIGURATION SETTING

You can set the configuration of the SPH10H by the voice menu instruction as below.

1. To enter into voice configuration menu, press and hold the Jog Dial for 12 seconds until the LED shows solid blue and you hear high tone double beeps. You will also hear a voice prompt saying **“Configuration menu”**.
2. Rotate the Jog Dial clockwise or counter-clockwise to navigate between the menus. You will hear voice prompts for each menu items as below.
3. You can enable the feature or execute the command by tapping the Phone Button, or disable the feature by tapping the Jog Dial.
4. If any button is not pressed within 10 seconds, the SPH10H will exit the configuration and goes back to stand-by.
5. If you want to exit the configuration immediately, rotate the Jog Dial until you hear a voice prompt, **“Exit configuration”**, and tap the Phone Button.

The voice prompt for each menu item is as below:

- | | |
|-------------------------|--------------------------------|
| (1) VOX phone | (4) PLC setting |
| (2) VOX intercom | (5) Delete all pairings |
| (3) Voice prompt | (6) Exit configuration |



9.1 Enabling/Disabling Voice Activated Phone Answering

Voice Prompt	“VOX phone”
Factory Default	Enable
Enable	Tap the Phone Button
Disable	Tap the Jog Dial

If this feature is enabled, you can answer incoming calls by simply saying a word loudly enough. For example, when you hear a series of beeps for an incoming call,

you can answer the phone by saying **“Hello”** or any other word loudly. This is enabled from the factory but you can disable this. If this mode is disabled, you have to tap the Jog Dial or the Phone Button to answer an incoming call.

9.2 Enabling/Disabling Voice Activated Intercom

Voice Prompt	“VOX intercom”
Factory Default	Disable
Enable	Tap the Phone Button
Disable	Tap the Jog Dial

If this feature is enabled, you can initiate an intercom conversation with the last connected intercom friend by speaking any word loudly enough. The most effortless way to trigger intercom VOX is to blow into the microphone as if blowing dust off the microphone. If you start an intercom conversation by VOX, the intercom terminates automatically when you and your intercom friend remain silent for 20 seconds. However, if you manually start an intercom conversation by tapping the Jog Dial, you have to terminate the intercom conversation manually.

However, even when this feature is enabled, if you terminate intercom conversation manually with the Jog Dial, you are not able to start intercom by voice temporarily. In this case, you have to tap the Jog Dial to restart the intercom. This is to prevent repeated unintentional intercom connections by strong wind noise. If you tap the Jog Dial to start an intercom conversation, it is not terminated by 20 seconds of silence. After turning SPH10H off and on, you can start intercom by voice again.

9.3 Enabling/Disabling Voice Prompts

Voice Prompt	“Voice prompt”
Factory Default	Enable
Enable	Tap the Phone Button
Disable	Tap the Jog Dial

You can disable voice prompts by configuration setting, but the following voice prompts are always on.

- Voice prompts for configuration setting menu
- Voice prompts for battery level Indicator
- Voice prompts for factory reset

9.4 Enabling/Disabling PLC (Packet Loss Concealment)

Voice Prompt	“PLC setting”
Factory Default	Enable
Enable	Tap the Phone Button
Disable	Tap the Jog Dial

The PLC (Packet Loss Concealment) algorithm is enabled from the factory. It improves the audio quality of the intercom and mobile phone handsfree in the presence of data packet errors within the Bluetooth link. It is recommended that this setting is always enabled. However, if you feel that the audio from the intercom or mobile phone is distorted in certain circumstances, you may be able to disable this setting and check it.

9.5 Delete All Bluetooth Pairing Information

Voice Prompt	“Delete all pairings”
Factory Default	N/A
Execute	Tap the Phone Button

To delete all Bluetooth pairing information of the SPH10H, rotate the Jog Dial until you hear a voice prompt, **“Delete all pairings”**, and tap the Phone

Button to confirm. Taping the Jog Dial is not available for this setting.

9.6 Exit Voice Configuration Menu

Voice Prompt	“Exit configuration”
Factory Default	N/A
Enable	Tap the Phone Button

To exit voice configuration menu and get back to stand-by mode, rotate the Jog Dial until you hear a voice prompt, **“Exit configuration”**, and tap the Phone Button to confirm. Taping the Jog Dial is not available for this setting.

Rotate Jog Dial	Tap Phone Button	Tap Jog Dial
VOX Phone	Enable	Disable
VOX Intercom	Enable	Disable
Voice Prompt	Enable	Disable
PLC Setting	Enable	Disable
Delete All Pairings	Execute	N/A
Exit Configuration	Execute	N/A

Voice Configuration Menu & Button Operations

10. FUNCTION PRIORITY

The SPH10H operates in the following order of priority:

- (highest)** Mobile phone,
Intercom,
Stereo music by audio cable
- (lowest)** Bluetooth stereo music

A lower priority function is always interrupted by a higher priority function. For example, stereo music is interrupted by intercom call, and intercom conversation is interrupted by incoming mobile phone call.

11. STEREO MUSIC

You can listen to stereo music in two ways: with the enclosed stereo audio cable or by Bluetooth wireless stereo.

11.1 By Stereo Audio Cable

Plug your stereo MP3 player directly to the SPH10H by using the enclosed 3.5mm stereo audio jack cable. To adjust the volume, rotate the Jog Dial on the headset. You may adjust the volume on the MP3 player also.



11.2 By Bluetooth Wireless Stereo

The Bluetooth audio device must be paired with the SPH10H by following the “Bluetooth Stereo Device Pairing” procedures described in the 6.2 chapter.

The SPH10H supports the Audio/Video Remote Control Profile (AVRCP), so if your Bluetooth audio device also supports the AVRCP, you can use the SPH10H to remotely control music playback. You not only can adjust the volume but also use the functions such as play, pause, next track and previous track.

1. To adjust the volume, rotate the Jog Dial.



2. To play or pause music, press and hold the Jog Dial for 1 second until you hear a double beep.



3. To track forward or track back, rotate while pressing the Jog Dial clockwise or counter clockwise.



Note:

Bluetooth music is available only when the MP3 jack port remains open. Please make sure the audio cable is unplugged from the clamp unit to play music by Bluetooth.

12. MOBILE PHONE CALL MAKING AND ANSWERING

1. When you have an incoming call, simply tap the Phone Button or the Jog Dial to answer the call.
2. You can also answer the incoming call by loudly speaking any word of your choice if Voice Activated Phone Answering is enabled.
3. To end a call, tap the Phone Button or press the Jog Dial for 2 seconds until you hear a beep, or wait for the called person to end the call.
4. To reject a call, press the Jog Dial for 2 seconds until you hear a beep while the phone is ringing.
5. To transfer a call between the mobile phone and the headset during the phone conversation, press the Phone Button for 2 seconds until you hear a beep.
6. There are several ways to make a phone call:
 - Enter numbers on your mobile phone keypad and make a call. Then the call is automatically transferred to the headset.
 - For some older mobile phones which do not automatically transfer calls to the headset, press the Phone Button after entering phone numbers on

the mobile phone keypad.

- Tap the Phone Button in stand-by mode to activate the voice dialing of your mobile phone. For this, the voice dialing feature must be available on the mobile phone. Refer to your mobile phone manual for further instruction.
- To redial the last number, double tap the Phone Button in stand-by mode. You will hear a voice prompt saying **“Last number redial”**.

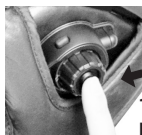
Answer	Tap Phone Button or Tap Jog Dial or Say “Hello”
End	Tap Phone Button or Press Jog Dial for 2”
Reject	Press Jog Dial for 2”
Transfer	Press Phone Button for 2”
Call	Use phone keypad
Redial	Double tap Phone Button
Voice Command	Tap Phone Button

Mobile Phone Call Button Operations

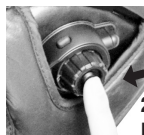
13. TWO-WAY INTERCOM

13.1 Start and End Two-way Intercom

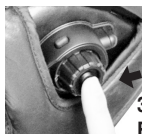
1. You can start an intercom conversation with one of any intercom friends by tapping the Jog Dial: single tapping to intercom with the first intercom friend, double tapping with the second intercom friend, and triple tapping with the third intercom friend.



1st Intercom Friend



2nd Intercom Friend



3rd Intercom Friend

Start Two-way Intercom Conversation

2. To terminate an intercom conversation, single tap the Jog Dial. Any intercom connection with any intercom friend will be terminated by a single

tapping. A double or triple tapping will do nothing in this case.



Terminate

End Two-way Intercom Conversation

	1st intercom friend	2nd intercom friend	3rd intercom friend
Start intercom	Single tap	Double tap	Triple tap
End intercom	Single tap		

Start & End Two-way Intercom

13.2 Intercom and Mobile Phone Call

1. When you have an incoming mobile phone call during an intercom conversation, you will hear a ring tone. You can choose whether to 1) answer the mobile phone call and stop the intercom conversation, or 2) reject the phone call and stay on the intercom conversation.
 - a. To answer the phone call and stop the intercom conversation, tap the Jog Dial or the Phone

Button. When you hang up the phone call, the intercom will automatically be recovered.

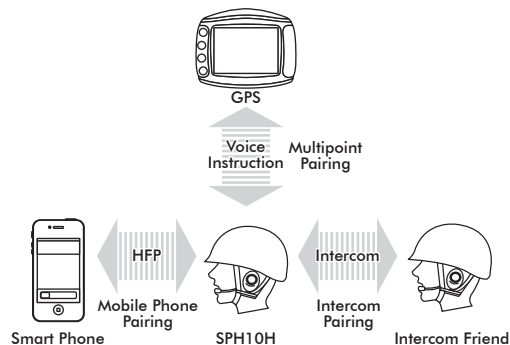
- b. To reject the phone call and stay on the intercom conversation, press the Jog Dial for 2 seconds until you hear a beep.

Unlike other motorcycle Bluetooth headsets, this prevents a user from being dropped out of an intercom conversation by an incoming mobile call.

2. When you have an incoming intercom call during a mobile phone call, you will hear 4 high tone beeps, alerting you that there is an incoming intercom call. You will also hear a voice prompt saying **“Intercom requested”**. In this case, the intercom call does not override the mobile phone call because intercom has lower priority than mobile call. You have to hang up the mobile phone call to make or receive an intercom call.

13.3 Intercom and GPS

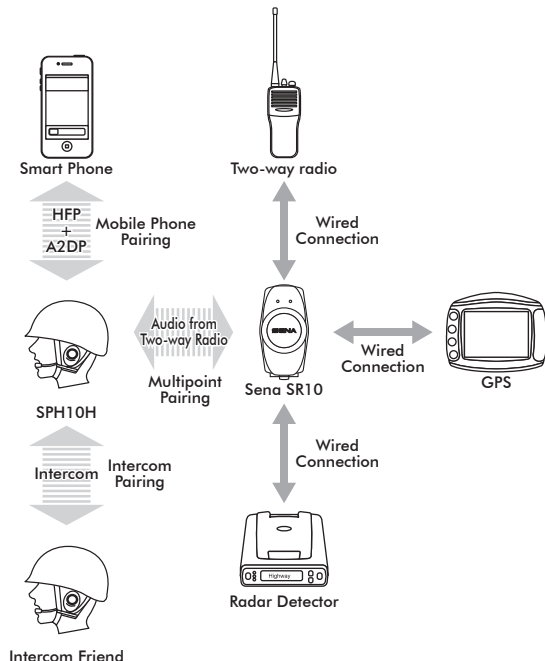
If you pair a Bluetooth GPS to the SPH10H as described in 6.3 of this user's guide, you can hear the turn-by-turn voice instruction of the GPS while having an intercom conversation. The GPS voice instruction interrupts intercom conversation, but it is automatically reestablished after the GPS voice instruction ends.



Intercom and GPS voice instruction

13.4 Intercom and Two-way Radio

As described in 6.4 of this user's guide, you can use a two-way radio and SPH10H Bluetooth intercom simultaneously by using the Sena SR10, a Bluetooth Two-way Radio Adapter, along with the SPH10H. Incoming audio from the two-way radio is not interrupting an intercom conversation but is heard in background. This is useful when you have an intercom conversation with a passenger on the back seat and use a two-way radio for group communication with other motorcycle riders.

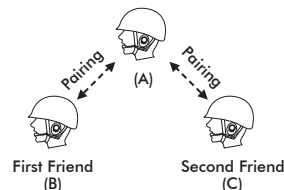
**Intercom and Two-way Radio**

14. THREE-WAY CONFERENCE INTERCOM

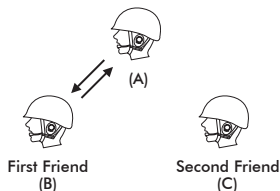
14.1 Start Three-way Intercom

You (A) can have a three-way conference intercom with two other SPH10H friends (B & C) by establishing two intercom connections at the same time. While a three-way conference intercom is in progress, mobile phone connection of all three participants would be temporarily disconnected, but as soon as the conference intercom terminates or one of the participants leaves the intercom, all mobile phones would be automatically reconnected. During the conference intercom, if you have an incoming mobile phone call, terminate the conference intercom to automatically reconnect the mobile phone and receive the call.

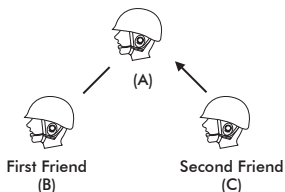
1. You (A) need to be paired with two other friends (B & C) for three-way conference intercom.



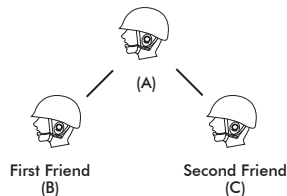
2. Start an intercom conversation with one of the two friends in your intercom group. For example, you (A) may start an intercom conversation with the intercom friend (B). Or intercom friend (B) may start an intercom call with you (A).



3. The second intercom friend (C) may join the intercom by making an intercom call to you (A).



4. Now you (A) and two SPH10H intercom friends (B & C) are having a three-way conference intercom.



14.2 End Three-way Intercom

When you are a member of an active three-way conference intercom, you can completely terminate the conference intercom or just disconnect an intercom connection with one of your active intercom friends.

1. Press the Jog Dial for 1 second until you hear a beep to terminate three-way conference intercom completely. It terminates both intercom connections with (B) and (C).
2. Tap or double tap the Jog Dial to disconnect intercom connection with one of the two intercom friends accordingly. For example, by single tapping the Jog Dial, you can just terminate the intercom connection with the first intercom friend (B).

However, you still have the intercom connection with your second intercom friend (C).

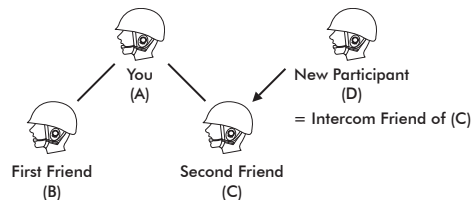
Jog Dial Operation	Result
Press for 1"	Disconnect (B) & (C)
Single tap	Disconnect (B)
Double tap	Disconnect (C)

End Three-way Intercom

15. FOUR-WAY CONFERENCE INTERCOM

15.1 Start Four-way Intercom

You can have four-way conference intercom with three other SPH10H users by adding one more intercom participant to the three-way intercom. While you are having three-way intercom as above in section 14.1, a new participant (D), who is an intercom friend of your intercom friend (C), may join the conference intercom by making an intercom call to your intercom friend (C). Please note that in this case, the new participant (D) is an intercom friend of (C), not of you (A).



15.2 End Four-way Intercom

As same in the case of three-way intercom, you can completely get out of the four-way conference

intercom or just disconnect a single intercom connection.

1. Press the Jog Dial for 1 second until you hear a beep to terminate four-way conference intercom. It terminates the intercom connections between you (A), and your intercom friends (B) and (C).
2. Tap or double tap the Jog Dial to disconnect the intercom connection with one of the two intercom friends accordingly. However, when you disconnect the second friend (C) by double tapping the Jog Dial, you will be disconnected with the third participant (D) as well. This is because the third participant (D) is connected with you via the second friend (C).

Jog Dial Operation	Result
Press for 1"	Disconnect (B), (C) & (D)
Single tap	Disconnect (B)
Double tap	Disconnect (C) & (D)

End Four-way Intercom

16. THREE-WAY CONFERENCE PHONE CALL WITH INTERCOM PARTICIPANT

You can have a three-way conference phone call by adding an intercom friend to the mobile phone conversation. While having a mobile phone call, make an intercom call to one of the intercom friends by tapping the Jog Dial to form a three-way conference call with the person on the mobile phone line. To disconnect the intercom first and go back to your private mobile phone call, terminate the intercom by tapping the Jog Dial. To end the mobile phone call first and maintain the intercom conversation, press the Jog Dial for 2 seconds, or tap the phone button, or wait for the person on the mobile phone line to end the call.

Start	Tap Jog Dial while having a mobile phone call
End intercom first	Tap Jog Dial
End phone call first	Press Jog Dial for 2" or Tap Phone Button or Wait for the called person to end the call

Start & End Three-way Conference Phone Call

17. INTERCOM FAILURE

When you try to start an intercom conversation with an intercom friend who is already having a conference intercom with other riders or a mobile phone call, you will hear a low tone double beep signifying an intercom busy signal. In this case, you have to try again later.

18. INTERCOM RECONNECTION

If your intercom friend goes out of range while having an intercom conversation, you may hear static noise and eventually the intercom will be disconnected. In this case, the SPH10H automatically tries to reconnect the intercom every 8 seconds and you will hear high tone double beeps until the intercom is reestablished. If you don't want to make a reconnection, tap the Jog Dial to stop the attempt.

19. RESET TO FACTORY DEFAULT SETTINGS

1. To restore the SPH10H to factory default settings, press and hold the Phone Button for 12 seconds until the LED shows solid red and you hear double beeps. You will hear a voice prompt saying **“Factory reset”**.
2. Within 5 seconds, press the Jog Dial to confirm reset. The headset will be restored to factory setting and switched off automatically. You will hear a voice prompt saying **“Headset reset, good-bye”**.
3. If you don't press the Jog Dial within 5 seconds, the reset attempt is canceled and the headset returns to stand-by mode. You will hear a voice prompt saying, **“Canceled”**.

20. FAULT RESET

When the SPH10H is not working properly or is in a faulty status for any reason, you may reset the system by pushing the pin-hole reset button on the back of the left headset main unit.

1. Detach the velcro pad inside of the left headset to see a set-screw on the main module under the ear flap.



2. Turn the set-screw to the left to take the module apart from the ear flap.
3. Take out the module from the front of the ear flap to see the reset pin-hole on the opposite side of the module.



4. Insert a paper clip into the reset pin-hole and press the reset button for 1 second with light pressure, at which time the SPH10H will be switched off. Turn the SPH10H back on. By powering back on, this will restore your current settings.



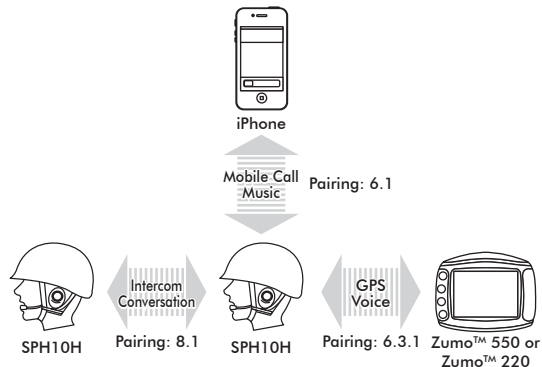
21. FIRMWARE UPGRADE

The SPH10H supports firmware upgrade function. Please visit Sena Bluetooth web site at www.senablueetooth.com to check the latest software downloads.

22. CASE STUDY

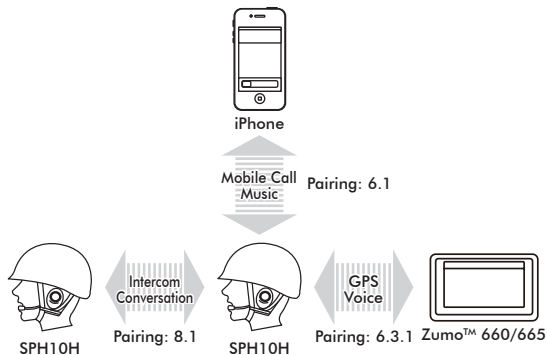
Case 1

- iPhone for mobile phone call and stereo music streaming
- Zumo™ 550 or Zumo™ 220 for GPS voice instruction
- SPH10H for two-way intercom



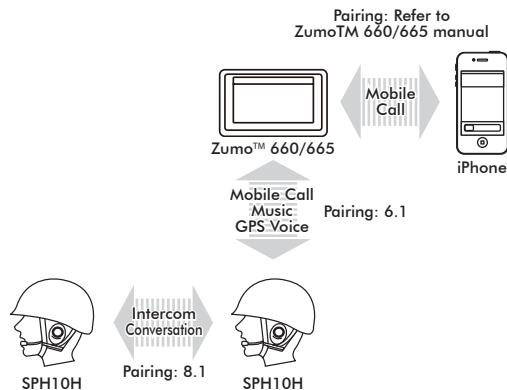
Case 2

- iPhone for mobile phone call and stereo music streaming
- Zumo™ 660/665 for GPS voice instruction and stereo music streaming
- SPH10H for two-way intercom



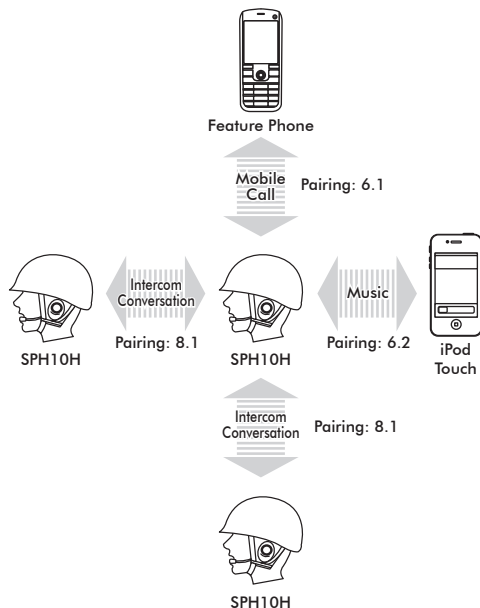
Case 3

- iPhone for mobile phone call via Zumo 660/665
- Zumo™ 660/665 for GPS voice instruction and stereo music streaming
- SPH10H for two-way intercom

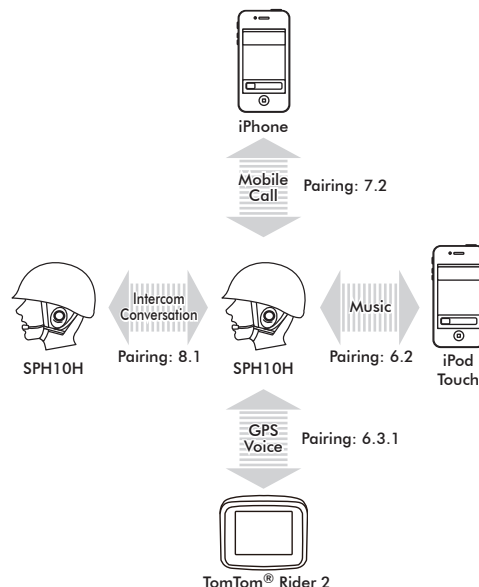


Case 4

- Feature phone for mobile phone call
- iPod Touch for stereo music streaming
- Two other SPH10Hs for three-way conference intercom

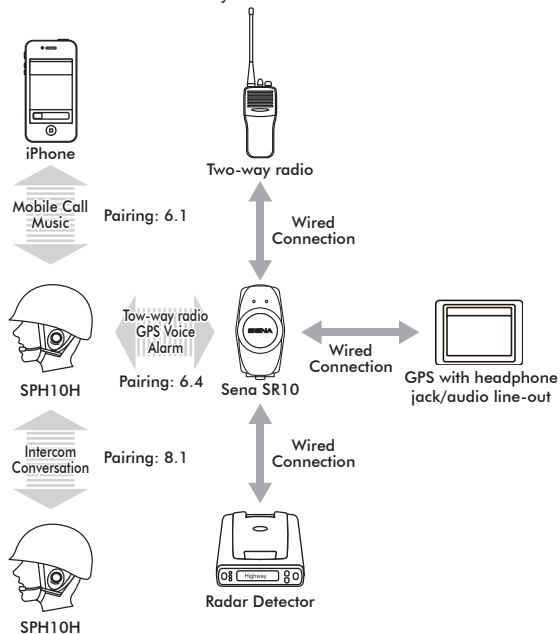
**Case 5**

- iPhone for mobile phone call
- iPod Touch for stereo music streaming
- TomTom® Rider2 for GPS voice instruction
- SPH10H for two-way intercom



Case 6

- iPhone for mobile phone call and stereo music streaming
- Sena SR10 for two-way radio, GPS voice instruction, and radar detector alarm
- SPH10H for two-way intercom

**BATTERY INFORMATION**

The SPH10H has an internal, non-removable, rechargeable battery. Do not attempt to remove the battery from the device as you may damage the device. The battery can be charged and discharged hundreds of times, but it will eventually wear out. Recharge the battery only with Sena approved chargers designated for this device. Use of an unapproved charger may present a risk of fire, explosion, leakage, or other hazard.

Always try to keep the battery between 15°C and 25°C (59°F and 77°F). Extreme temperatures reduce the capacity and lifetime of the battery. A device with a hot or cold battery may not work temporarily. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire as they may explode. Batteries may also explode if damaged. Never use any charger that is damaged. Operating times are estimates only and depend on the devices used together, features used, battery age and condition, temperatures to which battery is exposed, and many other factors.

MAINTENANCE AND CARE

The SHM10 should be treated with care and the following suggestions will help you protect your warranty coverage.

1. Do not use or store the device in dusty, dirty areas. Its moving parts and electronic components can be damaged.
2. Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
3. Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
4. Do not attempt to open the SPH10H
5. Do not drop or knock the device. Rough handling can break internal circuit boards and fine mechanics.
6. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
7. Do not paint the device. Paint can clog the moving parts and prevent proper operation.

These suggestions apply equally to the headset main unit, speaker-microphone clamp unit, or power charger.

DISPOSAL



The crossed-out wheel bin symbol on the product, literature, or packaging reminds you that all electrical and electronic products, batteries, and accumulators must be taken to separate collection at the end of their working life.

This requirement applies to the European Union and other locations where separate collection systems are available. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please do not dispose of these products as unsorted municipal waste, but hand it in at an official collection point for recycling.

CERTIFICATION AND SAFETY APPROVALS

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. The antenna used for this transmitter must not transmit simultaneously with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.

FCC Caution

Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

CE Declaration of Conformity

This product is CE marked according to the provisions of the R&TTE Directive (99/5/EC). Hereby, Sena declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For further information please consult <http://www.senablueetooth.com>.

Please note that this product uses radio frequency bands not harmonized within EU. Within the EU this product is intended to be used in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom and within EFTA in Iceland, Norway and Switzerland.

Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Bluetooth License

The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Sena is under license. Other trademarks and trade names are those of their respective owners.

The SPH10H is compliant with and adopts the Bluetooth® Specification 3.0 and has successfully passed all interoperability tests that are specified in the Bluetooth® specification. However, interoperability between the device and other Bluetooth®-enabled products is not guaranteed.

WAIVER AND GENERAL RELEASE

By using the SPH10H you waive all substantial legal rights including the right to sue. Please read the following carefully before using the device. If you do not accept all terms of this agreement, you should immediately return the product for a full refund. By using the headset you agree to be bound to this agreement and forfeit the right to sue. Using a communication device while riding a motorcycle, scooter, moped, ATV, quad-bike or any other vehicle or equipment, whether on land, water or air (jointly referred to as “Vehicle”) requires your complete and undivided attention. Sena Technologies, Inc., including its Officers, Directors, Affiliates, Parent Company, Representatives, Agents, Contractors, Sponsors, Employees, Suppliers and Resellers (jointly referred to as the “Company” or “Sena”) strongly advise you to take all necessary precautions and remain alert to the traffic, weather and road conditions if you choose to use the SPH10H headset, including all derivative models irrespective of its commercial name or branding (the “Device”), and stop your Vehicle on the roadside prior to initiating or receiving calls. Any publications, advertisements, announcements or similar notes that refer to using

the Device while riding a Vehicle are solely intended to address its technical capabilities and should not be misconstrued as if encouraging users to operate the Device while actively involved in traffic.

By way of purchasing this Device and not returning it for a full refund (see below), you are irrevocably releasing, indemnifying from any liability, loss, claim and expense (including attorney's fees) and holding Sena harmless for any bodily injuries, harm or death as well as losses or damages in goods, to any Vehicles including your own, or to any property or asset that belong to you or to third parties, any of which may result from using the Device under any circumstances or conditions and irrespective of jurisdiction. Sena will not be responsible for any physical damages, irrespective of reasons, conditions or circumstances, including malfunctioning of the Device, and all risks associated with operating it rest solely and entirely with the user of this Device, irrespective of whether the Device is used by the original purchaser or any third party.

Sena hereby notifies you that using this Device may also be in contravention to local, federal, state or national laws or regulations, and that any use of the Device is entirely at your sole risk and responsibility.

1. You, your heirs, legal representatives, successors or assigns, hereby voluntarily and forever release, discharge, indemnify and hold harmless Sena from any and all litigation, claims, debts, demands, actions and liability which may arise, directly or indirectly, from using the Device for any distress, pain, suffering, discomfort, loss, injury, death, damages to or in respect to any person or property however caused, WHETHER ARISING FROM THE NEGLIGENCE OR OTHERWISE, and which may hereafter accrue to you on some future date as a result of said use, to the fullest extent permitted by law.
2. You fully understand and assume the risks in using the Device, including risk of negligent acts or omissions by others.
3. You confirm that you are physically capable to use the Device and that you have no medical conditions or needs that may infringe upon your abilities to do so in a safe manner. You confirm that you are at least eighteen (18) years of age and that you have been advised of the risks associated with the use of the Device. You further confirm that you will not consume any alcohol that may affect your alertness or any mind-altering substance, and will not carry, use or consume these substances

before or during the use of the Device.

4. You fully acknowledge our warnings and understand that: (a) risks and dangers exist in using the Device while in traffic, including but not limited to injury or illness, strains, fractures, partial and/or total paralysis, death or other ailments that could cause serious disability; (b) these risks and dangers may be caused by the negligence of the manufacturers or its agents or any third party involved in designing or manufacturing the Device; (c) these risks and dangers may arise from foreseeable or unforeseeable causes. You hereby assume all risks and dangers and all responsibility for any losses and/or damages, whether caused in whole or in part by the negligence or other conduct of others, including the Company.
5. You confirm that you have read this release of liability and fully understand its terms and that you have given up substantial rights by not returning the Device for a full refund (see refund option below).

Two-Year Limited Warranty

Sena Technologies, Inc. ("Sena") warrants that this product ("Product") shall conform to and perform in accordance with published technical specifications and the accompanying written materials, and shall be free of defects in materials and workmanship, for a period of two (2) year from the date of purchase by the first consumer purchaser of the Product. The limited warranty extends only to the original consumer purchaser of the Product and is not assignable or transferable to any subsequent purchaser/end-user.

This warranty is limited to the repair and/or replacement, at Sena's discretion, of defective or non-conforming Product, and Sena shall not be responsible for the failure of the Product to perform specified functions, or any other non- conformance caused by or attributable to: (a) any misapplication or misuse of the Product; (b) failure of Customer to adhere to any of Sena's specifications or instructions; (c) neglect of, abuse of, or accident to, the Product; or (d) any associated or complementary equipment or software not furnished by Sena.

Limited warranty service may be obtained by delivering the Product to Sena or to the international distributor it was purchased through and providing

proof of purchase or receipt date. Customer agrees to insure the Product or assume the risk of loss or damage in transit, to prepay shipping charges to Sena, and to use the original shipping container or equivalent.

Limitation of Liability

EXCEPT AS EXPRESSLY PROVIDED HEREIN, SENA MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, WITH RESPECT TO ANY EQUIPMENT, PARTS OR SERVICES PROVIDED PURSUANT TO THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NEITHER SENA NOR ITS DEALER SHALL BE LIABLE FOR ANY OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION IN CONTRACT OR TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), SUCH AS, BUT NOT LIMITED TO, LOSS OF ANTICIPATED PROFITS OR BENEFITS RESULTING FROM, OR ARISING OUT OF, OR IN CONNECTION WITH THE USE OF FURNISHING OF EQUIPMENT, PARTS OR SERVICES HEREUNDER OR THE PERFORMANCE, USE OR INABILITY TO USE THE SAME, EVEN IF

SENA OR ITS DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL SENA OR ITS DEALERS TOTAL LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT.

Return for Full Refund

IF YOU ARE UNWILLING TO ACCEPT AND AGREE TO THE ABOVE CONDITIONS, YOU MAY RETURN THIS DEVICE TO SENA FOR A FULL REFUND, PROVIDED THAT YOU DO SO NO LATER THAN 14 BUSINESS DAYS FOLLOWING THE PURCHASE OF THE DEVICE AND SUBJECT TO THE WRAPPING BEING INTACT. WHEN DOING SO, PLEASE REFER TO THIS SECTION. BY NOT RETURNING THE DEVICE FOR REFUND WITHIN THE PERIOD PROVIDED, YOU ARE EXPLICITLY IN AGREEMENT WITH THE ABOVE AND RENOUNCE ALL RIGHTS TO FUTURE CLAIMS AND DEMANDS AGAINST SENA AS DEFINED ABOVE.

WARNING

Sena informs that using this device in public traffic may not be authorized by the law. Please check your local law and use this device only out of public traffic such as private properties or closed circuits. If the simultaneous use of both ear speakers while riding a motorcycle is prohibited by your local law, please use only a single ear speaker while riding. Sena denies any liability should you choose not to respect this warning.

Using the headset with loud volume may be harmful to your eardrums and cause hearing loss. Please maintain proper volume level to protect your ears.

